

# Notice of Allowability

Application No.

10/815,162

Examiner

Hiep Nguyen

Applicant(s)

WU, STEPHEN

Art Unit

2816

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 01-24-06.
2. ☒ The allowed claim(s) is/are 1-27,30 and 33-35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 03-23-06.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

TUANT T. LAM  
PRIMARY EXAMINER

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and /or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST submit no later than the payment of the issued fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney James A. Harrison (Reg. No. 40,401).

The following changes have been made to the subject application:

#### *In the claims*

##### IN CLAIM 1:

Lines 10-12, replace "a pulse-swallow configured divider module for producing a pre-scaled divider output based upon the oscillation produced by the VCO and a divided oscillation based upon the pre-scaled divider output" with --" a pulse-swallow configured divider module for producing a pre-scaled divider output and a divided oscillation based upon the oscillation produced by the VCO --.

##### IN CLAIM 10:

Lines 2-4, replace "a pulse-swallow configured divider module for producing a pre-scaled divider output based upon an oscillation produced by a frequency source and a divided oscillation based upon the pre-scaled divider output" with --" a pulse-swallow configured divider module for producing a pre-scaled divider output and a divided oscillation based upon the oscillation produced by a frequency source--.

##### IN CLAIM 18:

Lines 2-3, replace "producing a pre-scaled divider output based upon an oscillation produced by a frequency source; producing a divided oscillation based upon the pre-scaled divider output" with -- producing a pre-scaled divider output and a divided oscillation based upon an oscillation produced by a frequency source--.

##### IN CLAIM 30:

Lines 5-6, replace "a first latching block for latching the divided oscillation based upon the frequency source oscillation as a clock to produce a first latched signal" with --a first

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latching block for latching the divided oscillation based upon a pre-scaled divider output as a clock to produce a first latched signal--.

***Reason for Allowance***

The following is an examiner's statement of reasons for allowance: claims 1-27, 30 and 33-35 are allowed because the prior art of records (US 6,424,192) fails to teach or suggest a phase-locked loop comprising a pulse-wallow configured divider module for producing a pre-scaled divider output and a divided oscillation based upon the oscillation produced by the VCO as called for in claim 1; a divider for producing a low phase noise divided oscillation comprising a pre-scaled divider output and a divided oscillation based upon the oscillation produced by a frequency source as called for in claim 10; a method for producing a low phase noise divided oscillation comprising producing a pre-scaled divider output and a divided oscillation based upon an oscillation produced by a frequency source as called for in claim 18; a method for producing a low-noise divided oscillation comprising latching a divided signal based upon a pre-scaled divider output to produce a first latched signal wherein the pre-scaled divider output is based upon an oscillation, latching the first latched signal based upon the oscillation to produce a second latched signal, latching the second latched signal based upon the oscillation to produce a low-noise divided oscillation, biasing first and second latching blocks with a first latched signal at a first bias level, biasing a third latching block with a second latched signal at a second bias level as called for in claim 26 and a divider producing a low phase noise divided oscillation comprising a multi-modulus divider module for producing a divided oscillation, a first latching block for latching the divided oscillation based upon a pre-scaled divider output, a second latching block wherein the first and second latching blocks are biased by a first bias signal and a third latching block biased by a second bias signal having a magnitude greater than the first bias signal as called for in claim 30. Therefore, claims 1-27, 30 and 33-35 are presently allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.".

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***Conclusion***

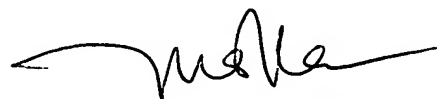
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

03-16-06 



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PRIMARY EXAMINER